# The Great Basin Naturalist

PUBLISHED BY THE
DEPARTMENT OF ZOOLOGY AND ENTOMOLOGY
BRIGHAM YOUNG UNIVERSITY, PROVO, UTAH

VOLUME XII

**DECEMBER 24, 1952** 

Nos. I-IV

# PACIFIC ISLANDS HERPETOLOGY NO. VI TAHITI AND MARQUESAS ISLANDS, NEW GUINEA AND AUSTRALIA. (1)

VASCO M. TANNER
Professor of Zoology and Entomology
Brigham Young University
Provo. Utah

Since the first paper in this series appeared (2) considerable additional material has been sent to the writer for study, and deposition in the University Herpetological Collections. In 1950, a small collection of lizards was made on the Marquesas and Society (Tahiti) Islands by George E. Magnesson and Phillip K. Humphreys. These two Zoology students of Prof. W. W. Tanner's were engaged in a shipping adventure which took them to these islands for a period of about six weeks. Six of the eight species reported by Schmidt and Necker, 1933, are represented in this collection. *H. leucostictus* Stej. and *Ablepharus b. poecilopleusus* (Wieg.) were not collected.

# LIZARDS FROM MARQUESAS AND SOCIETY ISLANDS

# Family Gekkonidae

LEPIDODACTYLUS LUGUBRIS (Dum. & Bibr.)

Dumeril and Bibron, Erpet. Gen. III, p. 304, 1836.

	, 1,
BYU 10095-96	Takaroa Island (George E. Magnesson, April, 1950 Tuamotu Group, Phillip K. Humphreys)
BYU 10067-68	Society Islands Nukahiva Island (Geo. E. Magneson, April, 1950 Taiohae Bay, Phillip K. Humphreys)
BYU 10070-72	Marquesas Islands Pueu, Tahiti (Geo. E. Magnesson, April 8, 1950 (East District) Phillip K. Humphries)
BYU 10076-78 10080	Punaauia, Tahiti (West District) (Geo. E. Magnesson, May 2, 1950 Phillip K. Humphreys)

<sup>(1)</sup> Contribution No. 129 from the Department of Zoology and Entomology, Brigham Young University.

<sup>(2)</sup> The Great Basin Naturalist, Vol. IX, nos. 1-2, Dec , 1948.

This common and wide spread house-gecko agrees in the main with specimens which have been studied from Mariana, Dutch East Indias, and Solomon Islands. The scale count and measurements of seven specimens is as follows: lamellae fourth toe 4 (13), 3 (12); supralabial 2 (11), 4 (12), 1 (13); infralabial 1 (9), 3 (10), 3 (11); length average 82 mm. In coloration the specimens agree with the Morotai and Solomon Island ones. One specimen has a regenerated tail which is 7 mm. wide and with two short forks. It looks very much like the fasciation of some plant leaves.

Fifteen eggs were collected at Punaauia, Tahiti, attached to plant leaves. Some eggs were just about ready to hatch. The shell was removed from two perfectly formed specimens. The lamellae and the head scales of these immature forms, agree with adults of this species. The eggs are white, almost perfectly round, and 8 mm. in diameter.

### HEMIDACTYLUS GARNETII (Dum. & Bibr.)

Dumeril and Bibron, Erpet. Gen. III, p. 368, 1836.

BYU 10080 Nukahiva Island Taiohae Bay, Marquesas Islands (Geo. E. Magnesson, Phillip K. Humphreys) April, 1950

Rostral quadrangular, with a median groove; nostril surrounded by the rostal and three nasals; twelve supralabials; ten infralabials; mental large; a pair of chin shields, the posterior pair separated from the labials; lamellae under the fourth toe fourteen; tail missing.

Color light grey above, with some brown spots; ventral surface white. Taken along the sea shore in Taiohae Bay.

#### GEHYRA MUTILATA (Wiegmann)

Wiegmann, Nova. Acla. Ac. Leop. Carol. XVII, p. 238, 1836.

BYU 10069 Nukahiva Island, Marquesas Islands
BYU 10079 Punaauia Tahiti (Geo. E. Magnesson, April 1, 1950 Phillip K. Humphreys)
(Geo. E. Magnesson, May 2, 1950 Phillip K. Humphreys)

Rostral wider than high, nostral surrounded by three nasals, the first labial and the rostral; supralabials nine; infralabials eight; chin shields three pair. the inner pair large and elongate; lamellae divided, six pair.

Color, whitish with dark brown spots on the back.

#### GEHYRA OCEANICA (Lesson)

Lesson, Voyage Coquille, Zool. II, I, p. 42, 1830

BYU 10065-66 Nukahiya Island, (Geo. E. Magnesson, April 1, 1950 Marquesas Islands Phillip K. Humphreys)
BYU 10075 Punaauia (Geo. E. Magnesson, May 2, 1950 Tahiti Phillip K. Humphreys)

A common species throughout the south Pacific Islands. These specimens agree with specimens studied from Morotai and Solomon Islands.

# Family Scincidae

### LYGOSOMA (LEIOLOPISMA) NOCTUA NOCTUA (Lesson)

Lesson, Voyage Coquille Zool. II, p. 48, 1830

BYU 10073-74 Pueu, Tahiti (Geo. E. Magnesson, April 15, 1950 Phillip K. Humphreys)
BYU 10082-84 Nukahiva Island (Geo. E. Magnesson, April 15, 1950 Taiohae Bay, Phillip K. Humphreys)
Marquesas Islands

Rostral broader than high, in contact with the frontonasal by a broad suture; nostril in the nasal. Ear opening oval and smaller than the lower eyelid disk, no lobules, seven supralabials; six infralabials; midbody scales 26 rows; lamellae under the fourth toe 18-21. It should be noted that there are fewer lamellae on the fourth toe in these and the Guadalcanal specimens than the ones from Morotai. This along with size and color pattern may justify recognizing it as a distinct race.

### EMOIA CYANURA (Lesson)

Lesson, Voy. Coquille Zool. II, p. 49, 1830.

BYU 10062-64		s (Geo. E. Magnesson, April 1, 1950 Phillip K. Humphreys) ds
BYU 10097	Takaroa, Tuamo (Coral atoll Archipelago)	tu(Geo. E. Magnesson, April 5, 1950 Phillip K. Humphreys)
BYU 10098	Papeete, Tahiti	(Geo. E. Magnesson, April 27, 1950 Phillip K. Humphreys)
BYU 10099	Pueu, Tahiti (Sea shore)	(Geo. E. Magnesson, April, 1950 Phillip K. Humphreys)

Similar in scalation and color to the Guadalcanal specimens which were reported on in a previous study. There are twenty-six to thirty scale rows around the middle of the body. Seven supralabials; six infralabials, sixty-three to seventy smooth lamellae under the fourth toe and six to seven compressed lamellae distad of the smooth ones. The length of the largest specimen No. 10063. is 127 (52+75) mm.

Color is dark brown to black with three dorsal stripes, one medium and two lateral; each stripe involves parts of two rows of scales. Under color greenish-blue to white. These specimens are well preserved.

### SOME LIZARDS FROM NEW GUINEA

The specimens for this report, collected by Mr. Ernest Reimschiissel, were taken at Hollandia, Dutch New Guinea in 1945. Mr. Wm. (Max) Weston was stationed at Lae, just north of Salamaua in western British New Guinea.

# Family Scincidae

LYGOSOMA (SPHENOMORPHUS) VARIEGATUM STICKELI Loveridge Fig. 1

Loveridge, Bull. Mus. Comp. Zool. Vol. 101. (2) p. 345, 1948. BYU 7882-83 Hollandia, New Guinea (E. Reimschiissel) Jan. 16, 1945

Rostral more than twice as wide as high; frontonasal undivided; single nasal; no supranasal; supraoculars six; supralabials eight; infralabials seven; submental much larger than the mentals; scale rows at middle of body forty; dorsal scales not larger at sides and under surface; lamellae under fourth toe twenty-five to twenty-six; length of body 44 and 41 mm. Tails in both specimens damaged.

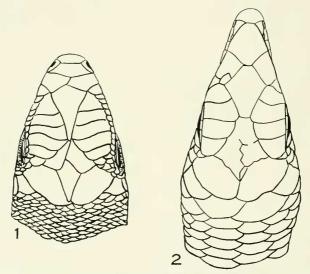


Fig. 1 Lygosoma (Sphenomorphus) variegatum stickeli Loveridge. 5x. (Original) Fig. 2. Emoia kordoana (Mever). 5x. (Original)

Color light brown above with dark and white blotches; sides with dark spots, which forms a faint streak which extends back on to the proximal part of the tail. Under surface of body and tail pinkish.

# LYGOSOMA (LYGOSOMA) SOLOMONIS SCHODEI Vogt

Vogt, Sitzb. Ges. Naturf. Freunde, Berlin, p. 6, 1912.

BYU 7875, Hollandia, New Guinea (E. Reimschiissel) Jan. 30, 1945 7877, 7893

Rostral a little higher than wide. Nasal entire, supraoculars four; supralabials seven to eight; infralabials six to seven; mental, submental and three pair of chin-shields large; scale rows at middle of body twenty-six to twenty-nine; lamellae under fourth toe fifteen to sixteen. Length of specimen No. 7877, 122 mm.

Color brown with small black blotches on back, sides and tail; under surface pinkish to brownish.

### LYGOSOMA (LEIOLOPISMA) MIOTIS Boulenger Boulenger, Ann. Mag. Nat. Hist. (6) XVI, p. 29, 1895.

BYU 7862 Lae, British New Guinea (Wm. (Max) Weston) Dec., 1944

Rostral two times as wide as high; nostril in single scale; frontonasal as broad as long; supraoculars four, the two anterior ones in contact with the frontal; frontoparietal single; interparietal and parietals large; lower eyelid with transparent disk; supralabials seven; infralabials seven; lamellae under fourth toe seventeen and nineteen; midbody scale rows twenty-six. Length of body thirty-nine num.; tail missing.

Color dorsal and ventral light, with lateral and mid dorsal rows of brown spots.

# LYGOSOMA (LEIOLOPISMA) FUSCUM LUCTUOSUM (P. & D.)

Peters and Doria, Ann. Mus. Civ. Stor. Nat. Genova, 13, p. 364, 1878.

BYU 7886 Hollandia, New Guinea (E. Reimschiissel) Jan. 16, 1945

Rostral twice as broad as high; nostril surrounded by the internasal, postnasal and first supralabial; frontal in contact with the frontonasal, longer than the frontoparietal and very small interparietal; lower eyelid with transparent disk; supraoculars four; supralabials seven, fifth large and in contact with lower eyelid. Midbody scale rows thirty-seven; lamellae under fourth toe thirty-two. Length 146 (61 + 85) mm.

Color, dark brown above; gray and pinkish on venter and under tail.

#### EMOIA CAERULEOCAUDA de Vis

de Vis, Ann. Queenland Mus. No. 2, p. 12, 1892.

BYU 8884 Dutch, New Guinea (S. G. Jewett, Jr.) April, 1945

Rostral wider than high; frontonasal in contact with the rostral; prefrontals small, separated; frontal in contact with the frontonasal;

frontoparietal fused with the interparietal; four supraoculars; seven supralabials; seven infralabials; lower eyelid with transparent disk; ear opening oval with anterior lobules as guards; lamellae under the fourth toe forty-five; scale rows around the middle of the body thirty; preanal scales enlarged. Length 124 (44 + 80) mm.

Color, dorsal black with three longitudinal bluish green stripes and a lateral stripe extending from the ear opening to the hind leg. Under color whitish.

### EMOIA BAUDINII BAUDINII (D. & B.)

Dumeril and Bibron, Erpet. Gen. V, p. 653, 1839.

BYU 7892, Hollandia, New Guinea (E. Reimschiissel) Jan. 16, 1945 7894

Rostral one and one half times as wide as high; prefrontals shorter than the frontal; frontoparietal as long as broad, fused with the small interparietal; four supraoculars; eight supraciliaries; seven supralabials, six infralabials; lamellae under fourth toe, 38-40; midbody scale thirty-eight. Length  $105~(40~+~65)~\mathrm{mm}$ .

Color, six rows of mid dorsal scales light brown, bordered by five lateral rows of dark scales. A light band which involves two rows of scales borders the ventral light colored scales.

### EMOIA TROPIDOLEPIS (Boulenger)

Boulenger, Trans. Zool. Soc. London, 20, p. 260, 1914.

BYU 7864 Lae, British (Wm. (Max) Weston) March, 1945 New Guinea

Rostral twice as wide as high, in contact with the first supralabial, nasal, internasal, and frontomasal; prefrontal and frontomasal fused; frontal, frontoparietals and interparietal fused; four large supraoculars; supralabials eight; infralabials seven; mental, submental and two pair of chin-shields large; lower eyelid with transparent disk. Ear opening round with three small anterior lobules; midbody scale rows thirty-eight, strongly keeled; lamellae on underside of fourth toe forty-nine; body length thirty-seven nm.; tail missing.

Color dark brown above, under-surface light brownish.

The lamellae are higher in number than reported by Loveridge, otherwise it agrees very closely with the description of this species.

# EMOIA KORDOANA (Meyer) Fig. 2

Meyer, Monatsb. Berlin Akad. Wiss., p. 133, 1874.

BYU 7865, Lae, British New Guinea (Wm. (Max) Weston) 1944 7866 Rostral twice as wide as high; nostril in a nasal scale which is closely bordered above by the supranasal; frontonasals in broad contact with the rostral, broader than long; four supraoculars; ear opening oval, with three short anterior lobules; lower eyelid with a transparent disk; eight supralabials; seven infralabials; mental and submental large. Scale rows around the middle of the body, twenty-four and twenty-eight; lamellae on the underside of the fourth toe sixtynine proximal smooth ones, and nine sharp edged distal ones.

Length of specimen No. 7866, 148 (55 + 93) mm. No. 7865, 116 (55 + 61) mm.

Color, above uniformally blackish with an iridescent sheen; below a suffusion of black on the light scales. No trace of color lines or band.

Dr. W. C. Brown suggests that Meyer's kordoana from Kordo, near Mysore Island, coast of New Guinea, be recognized and that the specimens above be considered as belonging to this species. Burt and Burt, 1932, follows Schuz in considering "kordoanus" as a synonym of *Emoia cyanura*. The specimens under consideration differ some in scale structure and color from the Solomon Islands specimens with which I have compared them.

# NOTES ON SOME AUSTRALIAN REPTILES Family Typhlopudae

TYPHLOPS DIVERSUS Waite

Waite, Rec. South Austr. Mus., I, p. 31, 1918.

BYU 7832 Guambi, Queensland (J. H. Williams January, 1945 Australia Mackay, Australia Gift to E. Reimschiissel)

This specimen was given to Mr. Reimschiissel by J. H. Williams who has an interesting small museum in Mackay. I reported in detail on this species in 1948.

Family Gekkonidae HETERONOTA BINOEI Gray Gray, Cat. Lizards, Brit. Mus. p. 174, 1845.

BYU 7834 Guambi, Queensland (J. H. Williams) January 24, 1945 Australia presented to E. Reimschiissel

Rostral twice as wide as high; supralabials seven; infralabials seven; mental large; two submental scales; eyes prominent; dorsal tubercles fourteen; lamellae under fourth toe nineteen; length 100 (41 + 59) mm.

Mr. Reimschiissel visited Australia for ten days in 1945 on a "rest leave" from Morotai. At Mackay, Australia, he visited Mr. Williams and his museum collections. This was a great help and stimulus for Mr. Reimschiissel, as a result of which he made a number of interesting collections and learned considerable about that area of Australia.

According to Loveridge (1934) this species is fairly wide spread over Australia. Mr. Edgar R. Waite (1929, p. 76) makes the following observations which are applicable to the specimen before me: "It is the last of our simple-toed geckoes, that is, those in which the fingers and toes are not dilated and have non-retractile claws."

### OEDURA LESUEURII (D. and B.)

Dumeril and Bibron, Erpet, Gen. 3, p. 392, 1836.

BYU 7888 Mackay, Queensland (E. Reimschiissel) Jan. 24, 1945 Australia

This specimen with a length of 107 mm. (65 + 42); thirteen supralabials; eleven infralabials; dorsal scales small and glandular; no preanal pores; tail roundish, with a diameter the same as the body at the groin and anal regions, is a perfect one. The color is brown above with spots of lighter ground color, under surface colorless. Mr. Reimschiissel collected this specimen under the bark of a dead tree.

# Family Pygopodidae LIALIS BURTONIS (Gray)

Gray, Proc. Zool. Soc., p. 134, 1834.

BYU 7833 Queensland, Australia (J. H. Williams)

This snake-lizard which is legless has a light grey dorsal and a dark brown ventral color on the body, but with a dark brown streak extending from the nostrils back through the eyes on the anterior part of the body. This streak is bordered ventrally by a few rows of white scales. The head is long, pointed and covered with scales. This species is wide-spread throughout Australia. This family of lizards is endemic to the Australian region.

# Family Agamidae

#### AMPHIBOLURUS BARBATUS (Cuvier)

Cuvier, Regne Animal, 2 ed., II, p. 35, 1829.

BYU 7908 Brisbane, Queensland (E. Reimschiissel) Feb. 22, 1945 7858 Australia

Mr. Reimschiissel collected this small bearded lizard in the grass near a road. It was not easily frightened. The body and tail length is 123 (49 + 74) mm.

# Family Scincidae

### TRACHYSAURUS RUGOSUS Gray

Gray, King's Voy. Australia, II, p. 430, 1827.

BYU 11108 (20) Australia A mounted specimen. A gift from Dr. Karl P. Schmidt and the Chicago Natural History Museum.

This is a valued specimen in the reptile collection of the University. It represents a distinctive endemic Australian Scincid.

LYGOSOMA (SPHENOMORPHUS) F. FASCIOLATUS (Gunther) Gunther, Ann. Mag. Nat. Hist. (3), 20, p. 47, 1867.

BYU 7858 Mackay, Queensland (E. Reimchiissel) Jan. 24, 1945 Australia

Rostrum just a little broader than high, frontonasal in contact with the rostral and prefrontals; frontal longer than the combined frontoparietals and interparietal; fifth supralabial in contact with the lower eyelid. Infralabials eight; lamellae beneath the fourth toe twenty-two. Midbody scale rows, No. 7845, 38; No. 7858, 35; total length 127 (43 + 84) mm.

Color dark brown with two faint lateral whitish bands; throat streaked with blackish lines; belly pinkish.

The two specimens reported here have the prefrontals in contact thus separating the frontal from the frontonasal, otherwise they are in perfect agreement with description and specimens of *fasciolatus* I have studied.

# LYGOSOMA (SPHENOMORPHUS) TENUIS BRACHYSOMA (Lonnberg and Anderson)

Lonnberg and Anderson, Svenska Velensk. Akah, Handl. Stockholm, 52, No. 7, p. 5, 1915.

BYU 7855 Mackay, Queensland (E. Reimschiissel) Jan. 24, 1945 Australia

Rostral one and one half times as broad as high; frontonasal forming a suture with the rostral and with the frontal; frontoparietals two; interparietal large, almost separating the parietals; supralabials seven; infralabials seven; ear opening large; lamellae under the fourth toe nineteen. Body length 33 mm. tail damaged.

Color, back and tail with transverse light and dark bands, ventral surface whitish.

This single specimen was taken along with specimens of *Able-pharus b. metallicus*.

# LYGOSOMA (LEIOLOPISMA) FUSCUM (D. and B.)

Dumeril and Bibron, Erpet. Gen. 5, p. 759, 1839.

BYU 7881 Mackay, Queensland (E. Reimschiissel) Jan. 17, 1945 Australia

Rostral twice as broad as high; frontonasal in contact with the rostral and the frontal; frontoparietal single; interparietal small; fifth supralabial large and in contact with the lower eyelid; transparent disk as large as ear opening; digets four; toes five; lamellae under the fourth toe thirty-one; midbody scale rows thirty-three; total length 129 (50 + 79) mm.

Color dark uniform brown above, grayish and pinkish below.

### LYGOSOMA (LEIOLOPISMA) PERONNII (D. and B.) Dumeril and Bibron, Erpet. Gen. V., p. 760, 1839.

BYU 7836 Mackay, Queensland (E. Reimschiissel) Jan. 22, 1945 11025 Australia

Rostral two and one-half mm. wide and one mm. high; supralabials seven; infralabials seven; frontoparietal single; interparietal small; transparent disk of lower eyelid larger than the ear opening; four digits; five toes; lamellae under the fourth toe twenty-five; midbody scales thirty, strongly bicarinate dorsally and tricarinate laterally. Length 113 (42 + 71) mm.

Color, dark brown above, white below.

### LYGOSOMA (LEIOLOPISMA) TRILINEATA (Gray) Gray, Ann. Nat. Hist., 2, p. 291, 1839.

BYU 7856 Mackay, Queensland (E. Reimschiissel) Jan. 24, 1945 7890 Australia

Rostral one and one half times as broad as high; frontonasal in contact with the rostral and frontal; interparietal small; frontoparietal single, large, as long as the frontal; supralabials seven; infralabials seven; transparent disk in lower eyelid a little larger than the ear opening; pentadactyle; lamellae beneath the fourth toe twenty-three; submental large in contact with the first and second infralabials, preanal scales enlarged; twenty-four rows of smooth midbody scales. Length 77 (35  $\pm$  42) mm.

Color dark brown above; brownish to whitish below.

The adpressed limbs do not meet; the lamellae are 23 and 24 beneath the fourth toe and there are no body streaks on either of the specimens. These may represent another species or race, but I am reluctant to assign them to other than the above species.

### ABLEPHARUS BOUTONII METALLICUS Blgr.

Boulenger, Cat. Liz. Brit. Mus., 3, p. 347, 1887.

BYU 7838, Mackay, Queensland (E. Reimschiissel) Jan. 24, 1945 7841, Australia

7844,

7846-52,

7854,

7857,

7859-60,

7889,

11107.

Rostral one and one half times as broad as high; nostril in a single large scale; frontonasal in narrow contact with the rostral; prefrontals large with a wide medium suture; in some of the specimens one of the prefrontals is divided into two scales; frontal small, making a very narrow contact with the large single frontoparietal; the second pair of supraoculars almost meet on the medium line; parietals large, in contact with a single pair of nuchals; fifth supralabial large and in contact with the lower ocular scale row; ear opening small; pentadactyle. Average length 95 mm.

Color, all adult specimens blackish brown, some small young specimens with faint white lateral lines.

Corporal Reimschiissel reports taking these specimens near water and moist situations.

#### LITERATURE CITED

Boulenger, Geo. A.

1885-87. Catalogues of the Lizards in the British Museum. Vol. II and III.

Garman, Samuel

1901. Some Reptiles and Batrachians from Australasia. Bull. Mus. of Comp. Zool. Vol. 39, No. 1, pp. 1-14, 2 pls.

Higgins, Harold

1943. A Few Reptiles from Western Somoa. Copeia No. 1, p. 59.

Loveridge, Arthur

1934. Australian Reptiles in the Museum of Comparative Zool., Cambridge, Massachusetts. Bull. Mus. Comp. Zool., Vol. 67, No. 6, pp. 243-383. 1948. New Guinean Reptiles and Amphibians in the Museum of Comparative Zoology and United States National Museum. Bull. Mus. Comp. Zool. Vol 101, No. 2, pp. 305-430.

# Schmidt, K. P.

- 1923. A List of Fijian Lizards. Copeia, No. 116, pp. 50-52.
- 1921. A List of the Lizards Collected by R. H. Beck in the Southern Pacific, November, 1920 to May, 1921. Copeia, No. 101, pp. 90-92.

Schmidt, K. P. and Necker, W. L.

1933. The Lizards of the Marquesas Islands. Bernice P. Bishop Museum, Occasional Papers, Vol. X, No. 2, p. 12.

Waite, Edgar R.

1929. The Reptiles and Amphibians of South Australia, pp. 1-270, 192 illustrations.